

(“1/2 QPSK”), QPSK with 3/4 rate coding (“3/4 QPSK”), among others. The IFFT unit 42 receives input from the modulator 36, the frame control FEC encoder 38 and synchronization signal generator 40, and provides processed data to post IFFT functional units (not shown), which further process the contents of the frame before transferring it to the AFE unit 26 (from FIG. 1). --

Please replace the paragraph beginning at page 11, line 5 with the following rewritten paragraph:

-- For purposes of simplification and clarity, other details of the PHY unit's transmitter/receiver functional units (which are known to those skilled in the art and not pertinent to the invention) have been largely omitted herein. --

Please replace the paragraph beginning at page 11, line 8 with the following rewritten paragraph:

-- Referring to FIG. 3, a format of a data transmission frame 80 to be transmitted over the transmission medium 14 by the transmitting network station 12a is shown. The data transmission frame 80 includes a payload 82, which carries the data received from the MAC unit 18. This data includes a header 84, body 86 and frame check sequence (FCS) 88. Preferably, the payload 82 is transmitted and received by the functional units illustrated in FIG. 2 in accordance

with techniques described in co-pending U.S. Patent Application Serial No. 09/455,186, entitled

“Forward Error Correction With Channel Estimation,” in the name of Lawrence W. Yonge III et

al., co-pending U.S. Patent Application Serial No. 09/455,110, entitled “Enhanced Channel

Estimation,” in the name of Lawrence W. Yonge III et al., and co-pending U.S. Patent

Application Serial No. 09/377,131, entitled “Robust Transmission Mode”, in the name of

Lawrence W. Yonge III et al., all of which are incorporated herein by reference; however, other

techniques may be used. The aforementioned U.S. Application Serial No. 09/377,131 (“Robust

Transmission Mode”) describes a standard mode and a reduced data rate robust mode

(hereinafter, simply referred to as “ROBO mode”), the ROBO mode providing for extensive

diversity (in time and frequency) and data redundancy to improve the ability of the network

stations to operate under adverse conditions. --

Please replace the paragraph beginning at page 13, line 13 with the following rewritten paragraph:

-- The first frame control field 98, the second frame control field 102 and the third frame control field 124 are produced by the frame control FEC encoder 38 in conjunction with the modulator 36 based on control information received from the MAC unit 18. Generally, the frame control fields 98, 102 and 124 include information used by all stations in the network for channel access, and, in the case of frame control field 98, information used by the destination for receiver demodulation. Because the frame control fields 98, 102 and 124 are intended to be heard by all stations, it is desirable for the frame control fields 98, 102 and 124 to have a robust form of physical layer encoding and modulation. Preferably, they are protected from transmission errors by a block code enhanced with time and frequency domain interleaving, as well as redundancy, in accordance with techniques described in a co-pending U.S. application Ser. No. 09/574,959, now issued U.S. Patent No. 6,289,000, entitled "Frame Control Encoder/Decoder for Robust OFDM Frame Transmissions," in the name of Lawrence W. Yonge III, incorporated herein by reference, although other techniques may be used. --

In the claims:

Please cancel claims 1-4 and 9-12.

Please amend claims 5 and 13 as follows:

-- 5. (Amended) A method of bounding latency of transmissions by stations on a shared access medium comprising:

associating one of multiple priority levels with a transmission; and
controlling the amount of time the transmission occupies the shared access medium based on the associated priority level,

wherein the transmission is a burst transmission of frames and wherein controlling comprises:

providing the burst transmission with control of the medium at the associated priority level, and